



## Selected Acquisition Report (SAR)

RCS: DD-A&T(Q&A)823-341



### **UH-60M Black Hawk Helicopter (UH-60M Black Hawk)**

As of FY 2015 President's Budget

Defense Acquisition Management  
Information Retrieval  
(DAMIR)

<b>Report Documentation Page</b>			Form Approved OMB No. 0704-0188	
<p>Public reporting burden for the collection of information is estimated to average 1 hour per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to Washington Headquarters Services, Directorate for Information Operations and Reports, 1215 Jefferson Davis Highway, Suite 1204, Arlington VA 22202-4302. Respondents should be aware that notwithstanding any other provision of law, no person shall be subject to a penalty for failing to comply with a collection of information if it does not display a currently valid OMB control number.</p>				
1. REPORT DATE <b>DEC 2013</b>	2. REPORT TYPE	3. DATES COVERED <b>00-00-2013 to 00-00-2013</b>		
4. TITLE AND SUBTITLE <b>UH-60M Black Hawk Helicopter (UH-60M Black Hawk)</b>		5a. CONTRACT NUMBER		
		5b. GRANT NUMBER		
		5c. PROGRAM ELEMENT NUMBER		
6. AUTHOR(S)		5d. PROJECT NUMBER		
		5e. TASK NUMBER		
		5f. WORK UNIT NUMBER		
7. PERFORMING ORGANIZATION NAME(S) AND ADDRESS(ES) <b>Utility Helicopters Project Office,,Program Executive Office Aviation,,Redstone Arsenal,,AL,35898</b>		8. PERFORMING ORGANIZATION REPORT NUMBER		
9. SPONSORING/MONITORING AGENCY NAME(S) AND ADDRESS(ES)		10. SPONSOR/MONITOR'S ACRONYM(S)		
		11. SPONSOR/MONITOR'S REPORT NUMBER(S)		
12. DISTRIBUTION/AVAILABILITY STATEMENT <b>Approved for public release; distribution unlimited</b>				
13. SUPPLEMENTARY NOTES <b>Selected Acquisition Report-SAR</b>				
14. ABSTRACT				
15. SUBJECT TERMS				
16. SECURITY CLASSIFICATION OF:			17. LIMITATION OF ABSTRACT <b>Same as Report (SAR)</b>	18. NUMBER OF PAGES <b>32</b>
a. REPORT <b>unclassified</b>	b. ABSTRACT <b>unclassified</b>	c. THIS PAGE <b>unclassified</b>		

**Table of Contents**

Common Acronyms and Abbreviations .....	3
Program Information .....	4
Responsible Office .....	4
References .....	4
Mission and Description .....	5
Executive Summary .....	6
Threshold Breaches .....	7
Schedule .....	8
Performance .....	10
Track to Budget .....	12
Cost and Funding .....	13
Low Rate Initial Production .....	20
Foreign Military Sales .....	21
Nuclear Costs .....	21
Unit Cost .....	22
Cost Variance .....	25
Contracts .....	28
Deliveries and Expenditures .....	29
Operating and Support Cost .....	30

## Common Acronyms and Abbreviations

Acq O&M - Acquisition-Related Operations and Maintenance  
APB - Acquisition Program Baseline  
APPN - Appropriation  
APUC - Average Procurement Unit Cost  
BA - Budget Authority/Budget Activity  
BY - Base Year  
DAMIR - Defense Acquisition Management Information Retrieval  
Dev Est - Development Estimate  
DoD - Department of Defense  
DSN - Defense Switched Network  
Econ - Economic  
Eng - Engineering  
Est - Estimating  
FMS - Foreign Military Sales  
FY - Fiscal Year  
IOC - Initial Operational Capability  
\$K - Thousands of Dollars  
LRIP - Low Rate Initial Production  
\$M - Millions of Dollars  
MILCON - Military Construction  
N/A - Not Applicable  
O&S - Operating and Support  
Oth - Other  
PAUC - Program Acquisition Unit Cost  
PB - President's Budget  
PE - Program Element  
Proc - Procurement  
Prod Est - Production Estimate  
QR - Quantity Related  
Qty - Quantity  
RDT&E - Research, Development, Test, and Evaluation  
SAR - Selected Acquisition Report  
Sch - Schedule  
Spt - Support  
TBD - To Be Determined  
TY - Then Year  
UCR - Unit Cost Reporting

## Program Information

Program Name
UH-60M Black Hawk Helicopter (UH-60M Black Hawk)
DoD Component
Army

## Responsible Office

Responsible Office
COL Thomas H. Todd, III Utility Helicopters Project Office Program Executive Office Aviation Redstone Arsenal, AL 35898-5000 <a href="mailto:thomas.h.todd8.mil@mail.mil">thomas.h.todd8.mil@mail.mil</a>

Phone 256-955-8939  
Fax 256-955-8109  
DSN Phone 645-8939  
DSN Fax 645-8109  
Date Assigned June 29, 2011

## References

SAR Baseline (Production Estimate)
Defense Acquisition Executive (DAE) Approved Acquisition Program Baseline (APB) dated March 31, 2005
Approved APB
Defense Acquisition Executive (DAE) Approved Acquisition Program Baseline (APB) dated June 20, 2011

## Mission and Description

The UH-60M Black Hawk Helicopter (UH-60M Black Hawk) serves as the Army's utility helicopter for the current and future force and is in line with the Army's Modernization Strategy, the National Military Strategy, and the National Defense Strategy. The UH-60M Black Hawk is a digital networked platform with greater range and lift to support maneuver Commanders through air assault, general support command and control, and aeromedical evacuation. Full rate production for this new-build helicopter began in 2007. The UH-60M Black Hawk, with the integrated Medical Evacuation (MEDEVAC) Mission Equipment Package (MEP) kit, provides day/night and adverse weather emergency evacuation of casualties. The integration of the MEDEVAC MEP onto the UH-60M changes the nomenclature to HH-60M.

## Executive Summary

The FY 2015 PB accelerated the procurement quantity buy profile as a result of the Aviation Restructure Initiative.

The eighth Multi-Year (MY)/Multi-Service contract, W58RGZ-12-C-0008, (MY VIII) covering the years FY 2012 - FY 2016 was awarded on July 6, 2012. The requirement for this Full Rate Production contract is for a total of 491 H-60M aircraft (270 UH-60Ms and 120 HH-60Ms for the Army, 18 UH-60Ms for the U.S. Air Force (USAF), 24 UH-60Ms for the Saudi Arabia National Guard, three UH-60Ms for Thailand, and 56 UH-60Ms for Taiwan).

MY VII deliveries are complete.

To date, a total of 161 MY VIII aircraft (102 UH-60Ms and 41 HH-60Ms for the US Army; and 18 UH-60Ms for the USAF) were accepted.

In the Delivery Profile Graphic (Plan vs. Actual) Sikorsky Aircraft Corporation is currently ahead of the contract delivery schedule by one aircraft.

There are no significant software-related issues with this program at this time.

## Threshold Breaches

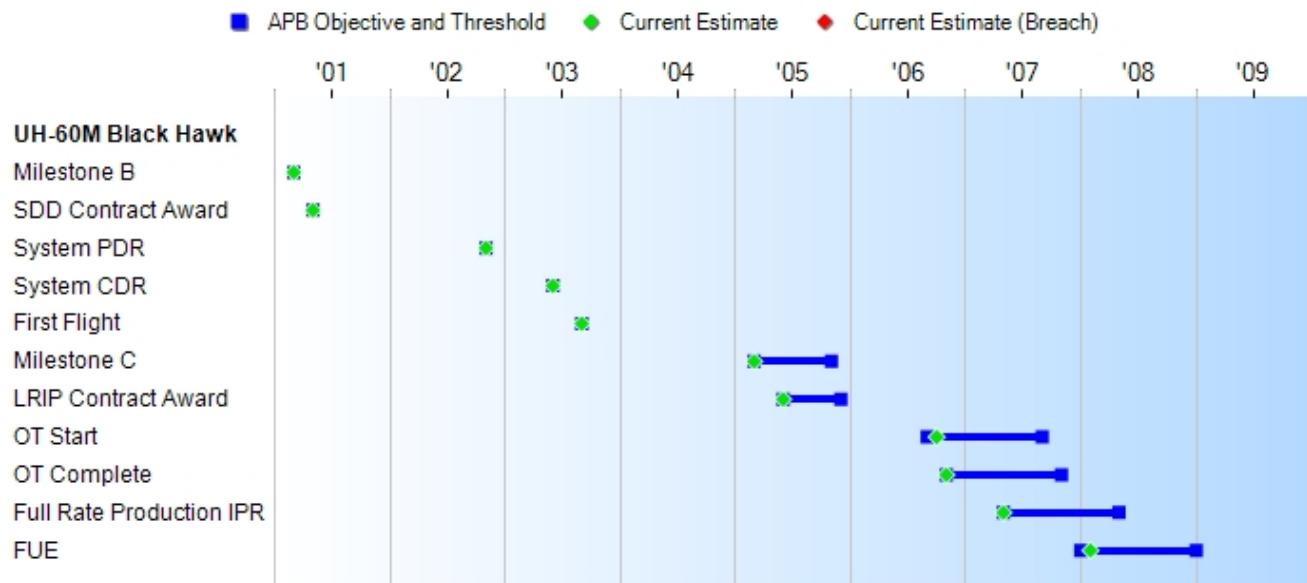
APB Breaches	
Schedule	<input type="checkbox"/>
Performance	<input type="checkbox"/>
Cost	RDT&E Procurement MILCON Acq O&M
O&S Cost	<input checked="" type="checkbox"/>
Unit Cost	PAUC APUC

### Explanation of Breach

O&S Cost Breach: The current O&S cost in the UH-60M Black Hawk June 2011 APB represents Operations and Maintenance cost not Operating and Support cost. The difference between the two is: Operations and Maintenance cost does not include Military Personnel costs. The UH-60M Black Hawk Program incorporated the revised Economic Useful Life expectancy from 20-years to 25-years as identified in the April 22, 2012 memorandum from the Assistant Secretary of the Army (Acquisition, Logistics and Technology).

Nunn-McCurdy Breaches	
Current UCR Baseline	
PAUC	None
APUC	None
Original UCR Baseline	
PAUC	None
APUC	None

## Schedule



Milestones	SAR Baseline Prod Est	Current APB Production Objective/Threshold		Current Estimate
Milestone B	MAR 2001	MAR 2001	MAR 2001	MAR 2001
SDD Contract Award	MAY 2001	MAY 2001	MAY 2001	MAY 2001
System PDR	NOV 2002	NOV 2002	NOV 2002	NOV 2002
System CDR	JUN 2003	JUN 2003	JUN 2003	JUN 2003
First Flight	SEP 2003	SEP 2003	SEP 2003	SEP 2003
Milestone C	FEB 2005	MAR 2005	NOV 2005	MAR 2005
LRIP Contract Award	MAR 2005	JUN 2005	DEC 2005	JUN 2005
OT Start	SEP 2006	SEP 2006	SEP 2007	OCT 2006
OT Complete	NOV 2006	NOV 2006	NOV 2007	NOV 2006
Full Rate Production IPR	MAY 2007	MAY 2007	MAY 2008	MAY 2007
FUE	JAN 2008	JAN 2008	JAN 2009	FEB 2008

### Change Explanations

None

**Acronyms and Abbreviations**

CDR - Critical Design Review  
FUE - First Unit Equipped  
IPR - In-Process Review  
OT - Operational Test  
PDR - Preliminary Design Review  
SDD - System Design & Development

## Performance

Characteristics	SAR Baseline Prod Est	Current APB Production Objective/Threshold		Demonstrated Performance	Current Estimate
Key Performance Parameters (KPPs)					
Interoperability (meet IERs)	All	N/A	N/A	N/A	N/A
Net-Ready	All	All	All Critical	All	All
Survivability IR Signature	N/A	Existing	Existing	Existing	Existing
Aircraft Survivability Equipment	N/A	Existing	Existing	Existing	Existing
Survivability Fuel Cells	N/A	14.5mm	7.62mm	7.62mm	7.62mm
Force Protection Armor Plating	N/A	14.5mm	7.62mm	7.62mm	7.62mm
External Lift					
Payload	10,000	10,000	4,500	4,888	4,888
Non-KPPs					
Troop Movement					
Airspeed (Sustained Cruise) (KTAS)	175	175	145	142.0	145.0
One Engine Inoperative (KTAS)	100	100	100	TBD	100.0
Combat Radius (w/20 min reserve) (KM)	500	500	225	225.0	225.6
Vertical Rate of Climb (fpm)	750	750	500	725	725
Vertical Rate of Climb w/ One Engine Inoperative (fpm)	200	200	100	TBD	100.0
Internal Lift Capability (290 lbs each)	11	11	11	11	11
Self-Deploy Range (nautical miles)	1260	1260	1056	TBD	1071
Ballistic Protection (ground fired armor piercing (mm))	14.5	14.5	7.62	14.5	14.5
Maintainability (mhrs per flight hr)	4.6	4.6	5.4	2.3	4.1
Unscheduled mhrs per	1.3	1.3	2.1	0.4	1.1

flight hr					
External Lift					
Vertical Rate of Climb (fpm)	500	500	200	200	200
Combat Radius (w/20 min reserve) (KM)	275	275	135	135	135

**Requirements Source**

Operational Requirements Document (ORD) dated January 29, 2007

**Change Explanations**

None

**Acronyms and Abbreviations**

fpm - feet per minute

hr - hour

IER - Information Exchange Requirement

IR - Infra-Red

KM - Kilometer

KTAS - Knots True Air Speed

lbs - Pounds

mhrs - Man Hours

min - Minutes

mm - Millimeter

w - With

## Track to Budget

### RDT&E

Appn	BA	PE
Army 2040	07	0203744A
Project	Name	
504	UH-60M Recapitalization/Modifications	(Shared) (Sunk)

Only UH-60M Black Hawk and UH-60M Upgrade Technologies (RDT&E only) funds are included in this SAR.

### Procurement

Appn	BA	PE
Army 2031	01	0210101A
Line Item	Name	
A05002	Black Hawk UH-60M (MYP)	(Shared)
Line Item	Name	
AA0492	Black Hawk UH-60M Upgrade/Recap	(Shared) (Sunk)

The Aircraft Procurement, Army (APA) Line Item AA0492 is shared with other UH-60M Black Hawk modifications such as Crashworthy External Fuel System, Medical Equipment Package, and other safety modifications. No funds from the AA0492 line are included in this SAR.

The APA Line Item AA0005 is the parent to the APA Line Item A05002.

The APA Line Item A05002 is shared with the Multi-Year Procurement (MYP) VI of UH-60L Black Hawk aircraft. With this being a shared funding line, only UH-60M Black Hawk Baseline Program costs are included. Procurement of UH-60L Black Hawk aircraft was completed in FY 2006.

## Cost and Funding

### Cost Summary

**Total Acquisition Cost and Quantity**

<b>Appropriation</b>	<b>BY2005 \$M</b>			<b>BY2005 \$M</b>	<b>TY \$M</b>		
	<b>SAR Baseline Prod Est</b>	<b>Current APB Production Objective/Threshold</b>	<b>Current Estimate</b>		<b>SAR Baseline Prod Est</b>	<b>Current APB Production Objective</b>	<b>Current Estimate</b>
RDT&E	717.5	761.3	837.4	761.3	739.3	780.4	780.4
Procurement	16084.2	21873.7	24061.1	20233.9	20107.8	27314.2	25459.0
Flyaway	--	--	--	19142.6	--	--	24113.4
Recurring	--	--	--	18927.6	--	--	23866.1
Non Recurring	--	--	--	215.0	--	--	247.3
Support	--	--	--	1091.3	--	--	1345.6
Other Support	--	--	--	902.7	--	--	1106.1
Initial Spares	--	--	--	188.6	--	--	239.5
MILCON	0.0	0.0	--	0.0	0.0	0.0	0.0
Acq O&M	0.0	0.0	--	0.0	0.0	0.0	0.0
<b>Total</b>	<b>16801.7</b>	<b>22635.0</b>	<b>N/A</b>	<b>20995.2</b>	<b>20847.1</b>	<b>28094.6</b>	<b>26239.4</b>

Confidence Level for Current APB Cost 50% -

In March, 2011 the Program Office and the Deputy Assistant Secretary of the Army for Cost and Economics (DASA-CE) agreed on an Army Cost Position which was used to establish the Acquisition Program Baseline (APB), dated June 20, 2011. Costs are reflected at the 50% Confidence Level in accordance with the Army Cost and Economic Analysis Program, Army Regulation 11-18.

It is difficult to calculate mathematically the precise confidence levels associated with life cycle cost estimates prepared for Major Defense Acquisition Programs (MDAPs). Based on the rigor in methods used in building estimates, the strong adherence to the collection and use of historical cost information, and the review of applied assumptions, we project that it is about equally likely that the estimate will prove too low or too high for execution of the program described.

<b>Quantity</b>	<b>SAR Baseline Prod Est</b>	<b>Current APB Production</b>	<b>Current Estimate</b>
RDT&E	8	8	8
Procurement	1227	1367	1367
<b>Total</b>	<b>1235</b>	<b>1375</b>	<b>1375</b>

## Cost and Funding

### Funding Summary

**Appropriation and Quantity Summary  
FY2015 President's Budget / December 2013 SAR (TY\$ M)**

Appropriation	Prior	FY2014	FY2015	FY2016	FY2017	FY2018	FY2019	To Complete	Total
RDT&E	780.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	780.4
Procurement	10664.1	1235.0	1369.1	1296.3	1507.8	1541.5	1485.9	6359.3	25459.0
MILCON	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Acq O&M	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
PB 2015 Total	11444.5	1235.0	1369.1	1296.3	1507.8	1541.5	1485.9	6359.3	26239.4
PB 2014 Total	11089.3	1163.0	1169.8	1401.0	793.7	733.4	1295.7	8047.9	25693.8
Delta	355.2	72.0	199.3	-104.7	714.1	808.1	190.2	-1688.6	545.6

Quantity	Undistributed	Prior	FY2014	FY2015	FY2016	FY2017	FY2018	FY2019	To Complete	Total
Development	8	0	0	0	0	0	0	0	0	8
Production	0	609	70	79	71	70	104	86	278	1367
PB 2015 Total	8	609	70	79	71	70	104	86	278	1375
PB 2014 Total	8	583	65	65	89	35	34	72	424	1375
Delta	0	26	5	14	-18	35	70	14	-146	0

## Cost and Funding

### Annual Funding By Appropriation

#### Annual Funding TY\$

2040 | RDT&E | Research, Development, Test, and Evaluation, Army

Fiscal Year	Quantity	End Item Recurring Flyaway TY \$M	Non End Item Recurring Flyaway TY \$M	Non Recurring Flyaway TY \$M	Total Flyaway TY \$M	Total Support TY \$M	Total Program TY \$M
2000	--	--	--	--	--	--	9.5
2001	--	--	--	--	--	--	28.8
2002	--	--	--	--	--	--	55.9
2003	--	--	--	--	--	--	96.8
2004	--	--	--	--	--	--	144.8
2005	--	--	--	--	--	--	99.8
2006	--	--	--	--	--	--	106.6
2007	--	--	--	--	--	--	117.5
2008	--	--	--	--	--	--	84.9
2009	--	--	--	--	--	--	30.8
2010	--	--	--	--	--	--	5.0
<b>Subtotal</b>	<b>8</b>	--	--	--	--	--	<b>780.4</b>

**Annual Funding BY\$****2040 | RDT&E | Research, Development, Test, and Evaluation, Army**

Fiscal Year	Quantity	End Item Recurring Flyaway BY 2005 \$M	Non End Item Recurring Flyaway BY 2005 \$M	Non Recurring Flyaway BY 2005 \$M	Total Flyaway BY 2005 \$M	Total Support BY 2005 \$M	Total Program BY 2005 \$M
2000	--	--	--	--	--	--	10.2
2001	--	--	--	--	--	--	30.5
2002	--	--	--	--	--	--	58.6
2003	--	--	--	--	--	--	99.5
2004	--	--	--	--	--	--	145.4
2005	--	--	--	--	--	--	97.4
2006	--	--	--	--	--	--	101.3
2007	--	--	--	--	--	--	109.0
2008	--	--	--	--	--	--	77.3
2009	--	--	--	--	--	--	27.7
2010	--	--	--	--	--	--	4.4
<b>Subtotal</b>	<b>8</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>761.3</b>

FY 2010 - FY 2011 RDT&E includes funds for the Fly-By-Wire flight test program and is no longer a part of the program of record as directed by the February 18, 2010 Acquisition Decision Memorandum (ADM). Subsequent reports will reflect the direction of the ADM.

**Annual Funding TY\$****2031 | Procurement | Aircraft Procurement, Army**

<b>Fiscal Year</b>	<b>Quantity</b>	<b>End Item Recurring Flyaway TY \$M</b>	<b>Non End Item Recurring Flyaway TY \$M</b>	<b>Non Recurring Flyaway TY \$M</b>	<b>Total Flyaway TY \$M</b>	<b>Total Support TY \$M</b>	<b>Total Program TY \$M</b>
2004	--	13.5	--	--	13.5	--	13.5
2005	5	82.5	6.1	5.6	94.2	2.8	97.0
2006	17	241.3	7.5	4.5	253.3	15.2	268.5
2007	72	1086.3	85.8	45.4	1217.5	54.4	1271.9
2008	77	1144.4	85.3	63.3	1293.0	61.6	1354.6
2009	66	962.3	92.0	9.0	1063.3	48.2	1111.5
2010	84	1182.5	172.0	4.5	1359.0	124.2	1483.2
2011	99	1512.5	131.4	36.2	1680.1	108.8	1788.9
2012	89	1298.0	174.5	35.9	1508.4	189.1	1697.5
2013	100	1263.9	179.6	3.7	1447.2	130.3	1577.5
2014	70	975.6	170.9	1.2	1147.7	87.3	1235.0
2015	79	1117.8	179.9	2.4	1300.1	69.0	1369.1
2016	71	1045.7	177.5	1.2	1224.4	71.9	1296.3
2017	70	1239.7	212.4	11.2	1463.3	44.5	1507.8
2018	104	1257.0	220.1	16.1	1493.2	48.3	1541.5
2019	86	1199.8	223.9	1.6	1425.3	60.6	1485.9
2020	46	811.5	216.3	0.9	1028.7	48.7	1077.4
2021	50	874.1	224.0	0.9	1099.0	29.8	1128.8
2022	50	945.9	232.0	1.0	1178.9	32.4	1211.3
2023	50	772.7	232.9	1.0	1006.6	33.1	1039.7
2024	50	830.3	240.8	1.0	1072.1	33.4	1105.5
2025	32	464.6	235.0	0.7	700.3	34.2	734.5
2026	--	--	44.3	--	44.3	17.8	62.1
<b>Subtotal</b>	<b>1367</b>	<b>20321.9</b>	<b>3544.2</b>	<b>247.3</b>	<b>24113.4</b>	<b>1345.6</b>	<b>25459.0</b>

**Annual Funding BY\$****2031 | Procurement | Aircraft Procurement, Army**

Fiscal Year	Quantity	End Item Recurring Flyaway BY 2005 \$M	Non End Item Recurring Flyaway BY 2005 \$M	Non Recurring Flyaway BY 2005 \$M	Total Flyaway BY 2005 \$M	Total Support BY 2005 \$M	Total Program BY 2005 \$M
2004	--	13.4	--	--	13.4	--	13.4
2005	5	79.6	5.8	5.4	90.8	2.7	93.5
2006	17	226.6	7.0	4.2	237.8	14.3	252.1
2007	72	999.9	78.9	41.8	1120.6	50.1	1170.7
2008	77	1036.9	77.2	57.4	1171.5	55.8	1227.3
2009	66	859.5	82.2	8.0	949.7	43.1	992.8
2010	84	1038.0	151.0	4.0	1193.0	109.0	1302.0
2011	99	1303.7	113.3	31.2	1448.2	93.8	1542.0
2012	89	1098.9	147.7	30.4	1277.0	160.1	1437.1
2013	100	1047.1	148.9	3.1	1199.1	107.9	1307.0
2014	70	792.6	138.7	1.0	932.3	71.0	1003.3
2015	79	890.8	143.4	1.9	1036.1	55.0	1091.1
2016	71	817.1	138.8	0.9	956.8	56.1	1012.9
2017	70	949.7	162.7	8.6	1121.0	34.1	1155.1
2018	104	944.1	165.2	12.1	1121.4	36.3	1157.7
2019	86	883.4	164.9	1.2	1049.5	44.6	1094.1
2020	46	585.8	156.2	0.6	742.6	35.2	777.8
2021	50	618.6	158.6	0.6	777.8	21.1	798.9
2022	50	656.3	161.0	0.7	818.0	22.5	840.5
2023	50	525.6	158.5	0.7	684.8	22.5	707.3
2024	50	553.7	160.6	0.7	715.0	22.3	737.3
2025	32	303.8	153.5	0.5	457.8	22.4	480.2
2026	--	--	28.4	--	28.4	11.4	39.8
<b>Subtotal</b>	<b>1367</b>	<b>16225.1</b>	<b>2702.5</b>	<b>215.0</b>	<b>19142.6</b>	<b>1091.3</b>	<b>20233.9</b>

On May 18, 2010, the Aviation Synchronization Conference Council of Colonels recommended the Authorized Acquisition Objective increase from 1,227 to 1,365. Two additional aircraft were procured in the upgrade configuration. These two aircraft will not be fielded.

**Cost Quantity Information****2031 | Procurement | Aircraft Procurement, Army**

<b>Fiscal Year</b>	<b>Quantity</b>	<b>End Item Recurring Flyaway (Aligned with Quantity) BY 2005 \$M</b>
2004	--	--
2005	5	70.0
2006	17	173.9
2007	72	914.3
2008	77	1103.9
2009	66	839.2
2010	84	1067.2
2011	99	1313.8
2012	89	1034.6
2013	100	1083.9
2014	70	812.2
2015	79	869.5
2016	71	779.4
2017	70	767.1
2018	104	1132.3
2019	86	943.9
2020	46	580.8
2021	50	598.2
2022	50	601.6
2023	50	602.8
2024	50	581.2
2025	32	355.3
2026	--	--
<b>Subtotal</b>	<b>1367</b>	<b>16225.1</b>

## Low Rate Initial Production

	Initial LRIP Decision	Current Total LRIP
<b>Approval Date</b>	3/31/2005	3/31/2005
<b>Approved Quantity</b>	40	40
<b>Reference</b>	Milestone C ADM	Milestone C ADM
<b>Start Year</b>	2005	2005
<b>End Year</b>	2007	2007

The Milestone C Acquisition Decision Memorandum (ADM) dated March 31, 2005, contains approval of up to 40 LRIP aircraft units and approval to award Advance Procurement Contract for the first lot of Full Rate Production aircraft.

## Foreign Military Sales

Country	Date of Sale	Quantity	Total Cost \$M	Memo
Thailand	9/25/2012	1	31.0	Case Number TH-B-UAD
Thailand	12/26/2011	2	62.3	Case Number TH-B-UAE
Saudi Arabia	11/30/2011	24	638.3	Case Number SI-B-WXP
Sweden	1/14/2011	15	275.7	Case Number SW-B-WAD
Taiwan	11/22/2010	60	1717.7	Case Number TW-B-YZC
Jordan	9/1/2010	2	26.3	Case Number JO-B-WAT
Mexico	8/3/2010	3	83.9	Case Number MX-B-UEJ
United Arab Emirates	12/12/2007	40	825.0	Case Number AE-B-ZUE
Bahrain	9/18/2007	9	151.9	Case Number BA-B-UIR

To date all FMS have been for the UH-60M Black Hawk configuration of the aircraft. Total Cost \$M reflects all costs associated with the procurement of the aircraft and other services provided to the specific country to include: training, spares, etc.

## Nuclear Costs

None

**Unit Cost****Unit Cost Report**

	<b>BY2005 \$M</b>	<b>BY2005 \$M</b>	
<b>Unit Cost</b>	<b>Current UCR Baseline (JUN 2011 APB)</b>	<b>Current Estimate (DEC 2013 SAR)</b>	<b>BY % Change</b>

**Program Acquisition Unit Cost (PAUC)**

Cost	22635.0	20995.2	
Quantity	1375	1375	
Unit Cost	16.462	15.269	-7.25

**Average Procurement Unit Cost (APUC)**

Cost	21873.7	20233.9	
Quantity	1367	1367	
Unit Cost	16.001	14.802	-7.49

	<b>BY2005 \$M</b>	<b>BY2005 \$M</b>	
<b>Unit Cost</b>	<b>Revised Original UCR Baseline (MAR 2005 APB)</b>	<b>Current Estimate (DEC 2013 SAR)</b>	<b>BY % Change</b>

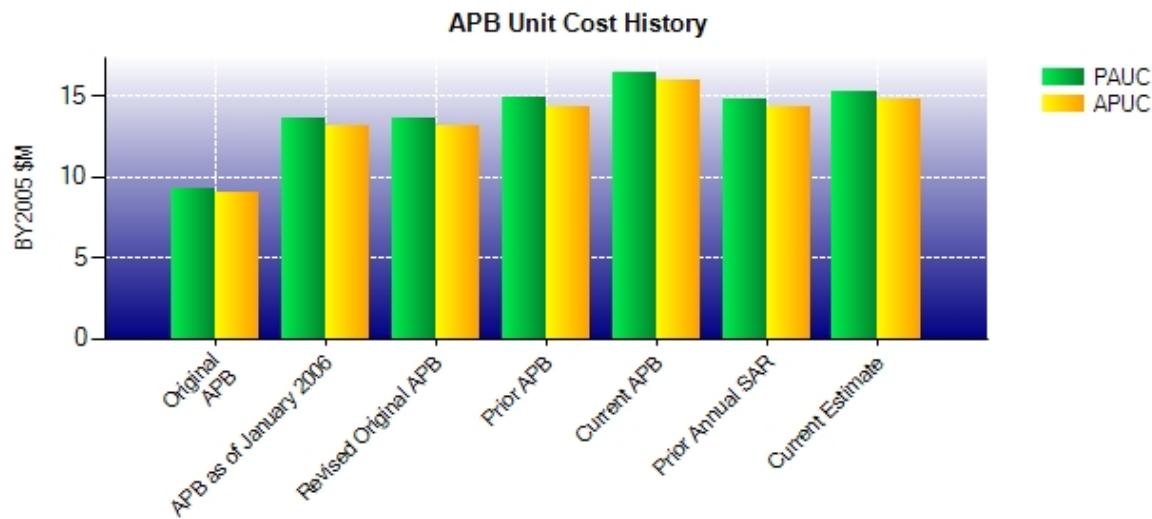
**Program Acquisition Unit Cost (PAUC)**

Cost	16801.7	20995.2	
Quantity	1235	1375	
Unit Cost	13.605	15.269	+12.23

**Average Procurement Unit Cost (APUC)**

Cost	16084.2	20233.9	
Quantity	1227	1367	
Unit Cost	13.109	14.802	+12.91

## Unit Cost History



	Date	BY2005 \$M		TY \$M	
		PAUC	APUC	PAUC	APUC
Original APB	FEB 2002	9.250	9.042	12.008	11.812
APB as of January 2006	MAR 2005	13.605	13.109	16.880	16.388
Revised Original APB	MAR 2005	13.605	13.109	16.880	16.388
Prior APB	FEB 2007	14.872	14.338	18.840	18.319
Current APB	JUN 2011	16.462	16.001	20.432	19.981
Prior Annual SAR	DEC 2012	14.787	14.317	18.686	18.225
Current Estimate	DEC 2013	15.269	14.802	19.083	18.624

## SAR Unit Cost History

### Initial SAR Baseline to Current SAR Baseline (TY \$M)

Initial PAUC Dev Est	Changes									PAUC Prod Est
	Econ	Qty	Sch	Eng	Est	Oth	Spt	Total		
12.008	-0.325	4.705	-0.262	0.996	-0.326	0.000	0.084	4.872	16.880	

**Current SAR Baseline to Current Estimate (TY \$M)**

PAUC Prod Est	Changes								PAUC Current Est
	Econ	Qty	Sch	Eng	Est	Oth	Spt	Total	
16.880	-0.039	0.675	0.523	0.476	0.110	0.000	0.458	2.203	19.083

**Initial SAR Baseline to Current SAR Baseline (TY \$M)**

Initial APUC Dev Est	Changes								APUC Prod Est
	Econ	Qty	Sch	Eng	Est	Oth	Spt	Total	
11.812	-0.324	4.469	-0.287	0.987	-0.354	0.000	0.085	4.576	16.388

**Current SAR Baseline to Current Estimate (TY \$M)**

APUC Prod Est	Changes								APUC Current Est
	Econ	Qty	Sch	Eng	Est	Oth	Spt	Total	
16.388	-0.042	0.728	0.506	0.481	0.102	0.000	0.461	2.236	18.624

**SAR Baseline History**

Item/Event	SAR Planning Estimate (PE)	SAR Development Estimate (DE)	SAR Production Estimate (PdE)	Current Estimate
Milestone A	N/A	N/A	N/A	N/A
Milestone B	N/A	APR 2001	MAR 2001	MAR 2001
Milestone C	N/A	MAR 2004	FEB 2005	MAR 2005
FUE	N/A	SEP 2006	JAN 2008	FEB 2008
Total Cost (TY \$M)	N/A	14662.0	20847.1	26239.4
Total Quantity	N/A	1221	1235	1375
Prog. Acq. Unit Cost (PAUC)	N/A	12.008	16.880	19.083

## Cost Variance

	Summary Then Year \$M			
	RDT&E	Proc	MILCON	Total
SAR Baseline (Prod Est)	739.3	20107.8	--	20847.1
Previous Changes				
Economic	+3.9	+62.8	--	+66.7
Quantity	--	+3291.3	--	+3291.3
Schedule	+27.5	+317.6	--	+345.1
Engineering	-2.1	+657.2	--	+655.1
Estimating	+11.8	-124.1	--	-112.3
Other	--	--	--	--
Support	--	+600.8	--	+600.8
Subtotal	+41.1	+4805.6	--	+4846.7
Current Changes				
Economic	--	-120.4	--	-120.4
Quantity	--	--	--	--
Schedule	--	+373.8	--	+373.8
Engineering	--	--	--	--
Estimating	--	+263.3	--	+263.3
Other	--	--	--	--
Support	--	+28.9	--	+28.9
Subtotal	--	+545.6	--	+545.6
Total Changes	+41.1	+5351.2	--	+5392.3
CE - Cost Variance	780.4	25459.0	--	26239.4
CE - Cost & Funding	780.4	25459.0	--	26239.4

Summary Base Year 2005 \$M				
	RDT&E	Proc	MILCON	Total
SAR Baseline (Prod Est)	717.5	16084.2	--	16801.7
Previous Changes				
Economic	--	--	--	--
Quantity	--	+2330.0	--	+2330.0
Schedule	+24.1	+122.5	--	+146.6
Engineering	+9.5	+529.3	--	+538.8
Estimating	+10.2	+27.3	--	+37.5
Other	--	--	--	--
Support	--	+477.8	--	+477.8
Subtotal	+43.8	+3486.9	--	+3530.7
Current Changes				
Economic	--	--	--	--
Quantity	--	--	--	--
Schedule	--	+440.6	--	+440.6
Engineering	--	--	--	--
Estimating	--	+192.5	--	+192.5
Other	--	--	--	--
Support	--	+29.7	--	+29.7
Subtotal	--	+662.8	--	+662.8
Total Changes	+43.8	+4149.7	--	+4193.5
CE - Cost Variance	761.3	20233.9	--	20995.2
CE - Cost & Funding	761.3	20233.9	--	20995.2

Previous Estimate: December 2012

Procurement	\$M	
	Base Year	Then Year
<b>Current Change Explanations</b>		
Revised escalation indices. (Economic)	N/A	-120.4
Adjustment for current and prior escalation. (Estimating)	+34.5	+41.3
Acceleration of procurement buy profile from FY 2014 - FY 2019 due to Aviation Restructure Initiative. (Schedule)	0.0	-256.5
Additional Schedule variance due to adjustment for allocation of Multi-Year (MY) advanced procurement dollars. (Schedule)	+440.6	+630.3
Revised estimate to reflect application of new outyear escalation indices. (Estimating)	-0.3	0.0
Revised estimate for MY IX Contract as a Single Service versus prior MY/Multi-Service contracts. (Estimating)	+138.6	+195.9
Revised estimate for MY IX Discrete Tooling. (Estimating)	+19.7	+26.1
Adjustment for current and prior escalation. (Support)	+3.1	+3.7
Increase in Other Support due to acceleration of procurement buy profile as directed by Aviation Restructure Initiative and revised cost estimates. (Support)	+11.4	+8.8
Increase in Initial Spares due to acceleration of procurement buy profile as directed by Aviation Restructure Initiative and revised cost estimates. (Support)	+15.2	+16.4
Procurement Subtotal	+662.8	+545.6

## Contracts

### Appropriation: Procurement

Contract Name **Multi-Year/Multi-Service 8**  
 Contractor **Sikorsky Aircraft Corporation**  
 Contractor Location **6900 Main St  
Stratford, CT 06614**  
 Contract Number, Type **W58RGZ-12-C-0008, FFP**  
 Award Date **July 06, 2012**  
 Definitization Date **July 06, 2012**

Initial Contract Price (\$M)			Current Contract Price (\$M)			Estimated Price at Completion (\$M)	
Target	Ceiling	Qty	Target	Ceiling	Qty	Contractor	Program Manager
4560.2	N/A	390	4560.2	N/A	390	4560.2	4560.2

### Cost and Schedule Variance Explanations

Cost and Schedule Variance reporting is not required on this FFP contract.

### Contract Comments

The UH-60M Black Hawk is currently in the third year of a five year Multi-Year/Multi-Service contract. Army deliveries are currently one aircraft ahead of schedule.

## Deliveries and Expenditures

Delivered to Date	Plan to Date	Actual to Date	Total Quantity	Percent Delivered
Development	8	8	8	100.00%
Production	568	569	1367	41.62%
Total Program Quantity Delivered	576	577	1375	41.96%

Expended and Appropriated (TY \$M)				
Total Acquisition Cost	26239.4	Years Appropriated		15
Expended to Date	11810.5	Percent Years Appropriated		55.56%
Percent Expended	45.01%	Appropriated to Date		12679.5
Total Funding Years	27	Percent Appropriated		48.32%

The above data is current as of 3/31/2014.

## Operating and Support Cost

### UH-60M Black Hawk

#### Assumptions and Ground Rules

##### Cost Estimate Reference:

The latest estimate was approved by the Army Cost Position (ACP) in March 2011.

Since the last ACP in March 2011 the Program Office Estimate has been updated to incorporate the revised Economic Useful Life (EUL) expectancy from 20-years to 25-years as identified in the April 22, 2012 memorandum from the Assistant Secretary of the Army (Acquisition, Logistics and Technology).

##### Sustainment Strategy:

The approved estimate is based on a system life of 20-years. The maintenance concept for the UH-60M Black Hawk is organic, two-level maintenance with the exception of the training base. The training base will continue to be Contractor Logistics Support. A total of 1,367 UH/HH aircraft will be procured with 1,365 being sustained. The two aircraft to not be sustained are in the upgrade configuration and are designated to be test aircraft.

##### Antecedent Information:

The total O&S Costs for UH-60L Black Hawk were not reported in the last UH-60L Black Hawk SAR dated December 31, 1999. The information in the O&S Cost Table is based on O&S Management Information Systems (OSMIS) data for the UH-60L Black Hawk (excluding Contingency Operations). Sustaining support costs for the UH-60L Black Hawk aircraft are not included in the table because the costs (software maintenance, system specific base operations, systems engineering/program management and transportation) are not collected in the OSMIS database. There are 780 UH-60L Black Hawks in the current fleet with an EUL expectancy of 25-years.

Unitized O&S Costs BY2005 \$K		
Cost Element	UH-60M Black Hawk Avg Annual Cost per Aircraft	UH-60L Black Hawk (Antecedent) Avg Annual Cost per Aircraft
Unit-Level Manpower	426.155	426.155
Unit Operations	54.194	54.194
Maintenance	373.686	284.892
Sustaining Support	1.225	0.000
Continuing System Improvements	6.157	0.000
Indirect Support	216.538	216.538
Other	0.000	0.000
Total	1077.955	981.779

##### Unitized Cost Comments:

The total O&S Costs are derived by multiplying the associated O&S average annual cost per aircraft by total number of aircraft fielded then multiplying by the total number of years each aircraft will be fielded. Equation: Average Annual Cost Per Aircraft \* Quantity Fielded \* System Life ( $\$1.0779548 \times 1365 \times 25 = \$36,785.207$  Base Year 2005 Dollars in Millions).

	Total O&S Cost \$M		
	Current Production APB Objective/Threshold		Current Estimate
	UH-60M Black Hawk	UH-60M Black Hawk	UH-60L Black Hawk (Antecedent)
Base Year	17652.5	19417.8	36785.2 <sup>1</sup>
Then Year	26086.5	N/A	58392.1

<sup>1</sup> APB O&S Cost Breach

Total O&S Costs Comments:

The current O&S cost in the UH-60M Black Hawk APB dated June 2011 represents Operations and Maintenance cost not Operations and Support cost. The difference between the two is: Operations and Maintenance cost does not include Military Personnel costs.

O&S Cost Variance		
Category	Base Year 2005 \$M	Change Explanation
Prior SAR Total O&S Estimate December 2012	36,813.1	
Cost Estimating Methodology	0.0	
Cost Data Update	-27.9	Adjustment for current and prior escalation.
Labor Rate	0.0	
Energy Rate	0.0	
Technical Input	0.0	
Programmatic/Planning Factors	0.0	
Other	0.0	
Total Changes	-27.9	
Current Estimate	36,785.2	

**Disposal Costs:**

Demilitarization cost is estimated to be \$74.893M (BY\$ 2005).